FEATURES:

- BETA / GAMMA DETECTORS
- OPERATES ON AC OR OPTIONAL BATTERY ``BACK-UP''
- VMF-TA ALARMS AT 7 μR/hr RISE WITHIN 1 SECOND
- VMF-TA & VMF-TB
  - PLASTIC SCINTILLATION SHEETS: 792 in³ VOLUME EACH
  - SENSITIVE AREA: 528 in² EACH
- VMF-TB SEE'S AND CAN ALARM AT 1 μR/hr ABOVE BACKGROUND
- VMF-TA-4X DOUBLES THE DETECTOR AREA & HAS 2 PM TUBES IN EACH TOWER
- VMF-TA-4X & VMF-TA-4X-O
  - PLASTIC SCINTILLATION SHEETS: 3315 in³ VOLUME EACH
  - SENSITIVE AREA: 2210 in² EACH
- VMF-TA-4X-O OPTIONAL: OVERHEAD DETECTOR
- OPTIONAL: WIRELESS REMOTE NOTIFICATION – PHONE, EMAIL, TEXT, ETC.
- REAL TIME DATA DOWNLOAD & ARCHIVE
- VIDEO – REAL TIME DISPLAY & CAPTURE
- AUDIO & VISUAL ALARM INCLUDES STROBE & HORN
- COMPLETELY WEATHER PROOF METAL HOUSING
- DYNAMIC BACKGROUND SUBTRACT
- COMPUTER & SOFTWARE
- FAST RATE OF CHANGE DESIGN
- CONTINUOUS OPERATION: ``SET AND FORGET''
- BI-LATERAL ENTRY DIRECTION
- OPTIONAL: VEHICLE SPEED SENSOR
- OPTIONAL: LICENSE PLATE CAPTURE
- OPTIONAL: NEUTRON DETECTOR
- OPTIONAL: PEDESTAL STAND

Model VMF-TA: Is a pass-through system.
Model VMF-TB: Achieves greater sensitivity by stop and count approach.
INSTALLED VEHICLE TRANSIT MONITOR

Model Series ~ VMF
VMF-TA ~ VMF-TB ~ VMF-TA-4

DESCRIPTION:

Model SERIES VMF are high sensitivity Gamma Monitoring systems for determining possible radiation contamination in containers or vehicles on a non-pause basis. Plastic scintillation sheets have higher sensitivity than cylindrical shaped scintillation crystals due to the larger surface area.

These systems can be installed at entrance and/or exit gates, at weight stations or check points, or anywhere that cars, trucks, rail cars or pedestrians will pass by; preferably at reduced speeds for more accurate readings.

Background is continually updated and subtracted thus giving net vehicle reading.

- **VMF-TA, VMF-TB, & the VMF-TA-4** includes the electronic control/alarm console plus two rugged weather proof detectors each with plastic scintillation sheets with 792 in³ volume each & a sensitive area of 528 in² each.

- **The VMF-TA-4X & the VMF-TA-4X-O** includes the electronic control/alarm console plus two rugged weather proof detectors each with plastic scintillation sheets & dual PM tubes with 3315 in³ volume each & a sensitive area of 2210 in² each.

- Rate of change electronics with audio and visual alarms.

- Operates from 110/220 AC power main; optional battery back-up.

- Operation for rugged outdoor use as well as indoors with bi-lateral direction entry.

- Since the operation of this instrument is based on rate of change in radiation, it will reliably pick up contamination as it passes near the monitor.

- Indoor/Outdoor Camera - Video capture of truck type, driver, and optional license plate capture.

- Free-standing strobe & horn alarm.

SPECIFICATIONS:

Detectors - Plastic Scintillators:

- **VMM-TA-4:** 4 ea. 12" W x 1.5" D x 44" H
- **VMF-TA & VMF-TB:** 2 ea. 12" W x 1.5" D x 44" H
  
  **Sensititve Volume:** 792 in³ per detector.

- **VMF-TA-4X:** 2 each 26" W x 1.5" D x 85" H premium
  
  **Sensitive Volume:** 3315 in³ per detector. **Sensitive Area:** 2210 in² per detector.

- **Dual PM Tubes in each detector.**

- **OPTIONAL: VMF-TA-4X-O:** ADD (1) 26" W x 1.5" D x 85" H premium
  
  **Sensitive Volume:** 3315 in³ per detector. **Sensitive Area:** 2210 in² per detector.

- **Dual PM Tubes in overhead detector.**

Range:

1 µR/hr to 1 mR/hr.

Power Requirements:

110/220 Volts AC, 50/60 Hz.

Power Connection:

Conduit or cable 6 ft. cable furnished. Three Prong grounded connector.

High Level Alarm:

Flashing red light and intermittent 2900 Hz tone. (90 dB)

Alarm Set:

**VMF-Series** internal factory set at .007 mR/hr rise per second.

May be reset by user.

**VMF-TB** internal factory set at 10% above ambient background.

May be reset by user.

Housing:

Weather-tight NEMA rated steel housing; water, moisture, & dust tight.

Cable:

100 ft Standard (User Specified Length)

TECHNICAL ASSOCIATES
OVERHOF TECHNOLOGY
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818-883-7043 (Phone) 818-883-6103 (Fax)
tagold@nwc.net
WWW.TECH-ASSOCIATES.COM
INSTALLED VEHICLE TRANSIT MONITOR

Model Series ~ VMF
VMF-TA ~ VMF-TB ~ VMF-TA-4

DISPLAY

Count Time: 1 to 20 seconds (VMF-TB only).
Energy Range: Gamma: 80 KeV to 6 MeV.
Beta: above 1 MeV, includes P$_{32}$, Sr$_{90}$, & N$_{16}$.
Communications: Built-in serial port and Ethernet Node.

WEIGHT & DIMENSIONS:

Dimensions: Control Box / Computer: 16" x 20" x 10" typical plus alarm Beacon.
Detector Towers: VMF-TA, VMF-TB, VMF-TA-4: 54" H x 15.5" W x 7" D.
Weight: 120 lbs
Detectors Towers: VMF-TA-4X, VMF-TA-4X-O: 90" H x 30" W x 5" D.
Weight: 1260 lbs

OPTIONAL ACCESSORIES:

Check Source: RAU-BGX, uranium source; license exempt.
Additional Relay: 5A SPDT to operate other circuits.
Remote Alarm: RAL-3W flasher, siren.
Power: 220 V, 50-60 Hz.
Battery Back-up.

Alternate Detector Types & Sizes:

Additional Detectors: Plutonium or Neutron or Beta.
Video: License plate capture
Vehicle Speed Record
Shielding: Provision made for adding shielding plates provided

VMF-L/O uses the same detectors as the other VMF Series models, but has simplified electronics with the LAM-10L "Alarming Ratemeter", instead of "Rate of Change" electronics.